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CLAIMS:

1.   A method for driving a display in a bi-stable device, comprising:

storing coded data (605, 610, 615) for driving the display (310) for different pixel

5   transitions;

retrieving a portion of the stored coded data based on at least a selected one of the

different pixel transitions;

decoding the portion of the stored coded data to provide decoded data; and

providing at least one voltage waveform for driving the display based on the

10   decoded data.

2.   The method of claim 1, wherein:

the stored coded data comprises voltage level and timing information for each of

the different pixel transitions.

3.   The method of claim 1, wherein:

15   the storing of the coded data comprises storing coded data for driving the display

at different temperatures; and

the retrieving of the portion of the stored coded data comprises retrieving the

portion of the coded data based on a selected one of the different temperatures.

4.   The method of claim 1, wherein:

20   the retrieving of the portion of the coded data comprises retrieving at least one

fixed length frame instruction.

5.   The method of claim 1, wherein:

the retrieving of the portion of the coded data comprises retrieving the portion of

the coded data based on a selected update mode (500, 510, 520, 530) of the display.

25   6.   The method of claim 1, wherein:

the stored coded data comprises voltage level and timing information for each of

the different pixel transitions and each of a plurality of different temperatures.

7.   The method of claim 6, further comprising:

storing pointers (635, 640, 645) to the stored coded data for the different pixel

30   transitions; and

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storing relative address information for locating the stored coded data for driving the display at the plurality of different temperatures based on offsets from associated ones of the pointers.

8.   An apparatus for use in driving a display in a bi-stable device, comprising:

5   means (100) for retrieving a portion of coded data (605, 610, 615) from a memory (320) based on at least a selected one of a plurality of different pixel transitions;

means (100) for decoding the portion of the stored coded data to provide decoded data; and

means (305) for providing at least one voltage waveform for driving the display

10   (310) based on the decoded data;

wherein the stored coded data includes data for driving the display for the plurality of different pixel transitions.

9.   The apparatus of claim 8, wherein:

the coded data comprises voltage level and timing information for each of the

15   plurality of different pixel transitions.

10.   The apparatus of claim 8, wherein:

the means for retrieving retrieves the portion of the stored coded data in at least one fixed length frame instruction.

11.   The apparatus of claim 8, wherein:

20   the means for retrieving retrieves the portion of the stored coded data based on a selected update mode (500, 510, 520, 530) of the display.

12.   The apparatus of claim 8, wherein:

the stored coded data comprises data for driving the display at different

temperatures; and

25   the means for retrieving retrieves the portion of the stored coded data based on a selected one of the different temperatures.

13.   The apparatus of claim 12, wherein:

the stored coded data comprises voltage level and timing information for each of the different pixel transitions and each of the different temperatures.

30   14.   The apparatus of claim 8, wherein:

the display comprises an electrophoretic display.

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15.   A program storage device tangibly embodying a program of instructions executable by a machine to perform a method for driving a display in a bi-stable device, the method comprising:

storing coded data (605, 610, 615) for driving the display (310) for different pixel

5   transitions;

retrieving a portion of the stored coded data based on at least a selected one of the different pixel transitions;

decoding the portion of the stored coded data to provide decoded data; and

providing at least one voltage waveform for driving the display based on the

10   decoded data.

16.   The program storage device of claim 15, wherein:

the stored coded data comprises voltage level and timing information for each of the different pixel transitions.

17.   The program storage device of claim 15, wherein:

15   the retrieving of the portion of the coded data comprises retrieving at least one fixed length frame instruction.

18.   The program storage device of claim 15, wherein:

the retrieving of the portion of the coded data comprises retrieving the portion of the coded data based on a selected update mode (500, 510, 520, 530) of the display.

20   19.   The program storage device of claim 15, wherein:

the storing of the coded data comprises storing coded data for driving the display at different temperatures; and

the retrieving of the portion of the stored coded data comprises retrieving the portion of the coded data based on a selected one of the different temperatures.

25   20.   The program storage device of claim 15, wherein:

the stored coded data comprises voltage level and timing information for each of the different pixel transitions and each of a plurality of different temperatures.

21.   The program storage device of claim 20, wherein the method further comprises:

30   storing pointers (635, 640, 645) to the stored coded data for the different pixel transitions; and

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storing relative address information for locating the stored coded data for driving the display at the plurality of different temperatures based on offsets from associated ones of the pointers.